

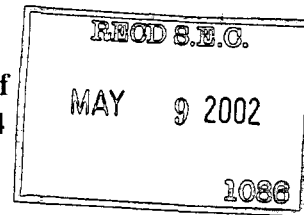
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FORM 6-K  
SECURITIES AND EXCHANGE COMMISSION  
Washington, DC 20549



April 2002

Report of Foreign Private Issuer  
Pursuant to Rule 13a-16 or 15d-16 of  
The Securities Exchange Act of 1934



El Nino Ventures Inc.

(Translation of registrant's name into English)

2303 West 41<sup>st</sup> Avenue  
Vancouver, BC V6M 2A3

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover  
Form 20F or Form 40F.

Form 20F X

Form 40F \_\_\_\_\_

Indicate by check mark whether the registrant by furnishing the information contained in  
this Form is also thereby furnishing the information to the Commission pursuant to Rule  
12g3-2(b) under the Securities Act of 1934.

Yes X

No \_\_\_\_\_

If "Yes" is marked, indicate below the file number assigned to the registrant in  
connection with Rule. 0-31108

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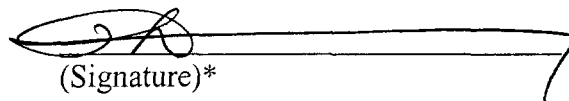
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FINANCIAL

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has  
duly caused this report to be signed on its behalf by the undersigned, thereunto duly  
authorized.

El Nino Ventures Inc.  
(Registrant)

Date: May 8, 2002

  
(Signature)\*  
Taryn Downing  
Corporate Secretary

\*Print the name and title of the signing officer under his signature.



**GEOLOGIC REPORT GS02EXE-1**

**EXECUTIVE SUMMARY REPORT  
FOR THE GOLDEN SUMMIT PROJECT,  
FAIRBANKS MINING DISTRICT,  
ALASKA**

prepared for

Freegold Recovery Inc. USA.  
2303 West 41<sup>st</sup> St.  
Vancouver, B.C. V6M 2A3

prepared by

Avalon Development Corp.  
P.O. Box 80268  
Fairbanks, AK 99708

March 1, 2002

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## SUMMARY

The Golden Summit project is located in a road accessible mining district with excellent land status and infrastructure. Several historic producing mines are present on the property and extensive surface exploration has been conducted on the property and on adjacent lands since 1992. Drilling conducted prior to 2000 indicated the property had potential for high-grade vein hosted resources such as those intercepted beneath the old underground workings of the Cleary Hill mine. Drilling completed in 2000 indicated that potential bulk mineable resources could exist in the newly discovered Currey zone. Additional drilling, geophysics, trenching, geologic mapping and geochemical sampling are recommended for the project. The cost of these programs is estimated at approximately US\$60,000. Data compilation also is recommended for several of the other historic high-grade mines on the property, none of which have had recent exploration conducted on them. No budget is specified for this work at present.

## INTRODUCTION AND TERMS OF REFERENCE

The following report was commissioned by Freegold Recovery Inc. USA, a subsidiary of International Freegold Mineral Development (Freegold) to summarize the geology and mineralization of the Golden Summit gold project in Interior Alaska. Freegold first acquired an interest in the property in 1991 and has conducted exploration on the project in 1992, 1994-1998, 2000 and 2002. Avalon was retained to complete this summary report for Freegold. Recommended work programs are included at the end of this report.

Unless otherwise noted, all costs contained in this report are denominated in United States dollars (US\$1.00 = CDN\$1.50). For purposes of this report, the term "opt" will refer to troy ounces per short ton while "gpt" will refer to grams per metric tonne.

## DISCLAIMER

The attached report has been prepared by Avalon using public documents acquired by the author and private documents given to the author for this purpose. While reasonable care has been taken in preparing this report, Avalon cannot guarantee the accuracy or completeness of all supporting documentation. In particular, Avalon did not attempt to determine the veracity of geochemical data reported by third parties, nor did Avalon attempt to conduct duplicate sampling for comparison with the geochemical results provided by other parties. Consequently, the use of this report shall be at the user's sole risk and Avalon hereby disclaims any and all liabilities arising out of the use or distribution of this report or reliance by any party on the data herein. The interpretive views expressed herein are those of the author and may or may not reflect the views of Freegold.

## PROPERTY DESCRIPTION AND LOCATION

The Golden Summit project is located approximately 20 road miles north of Fairbanks, Alaska (Figure 1). The Golden Summit project consists of 14 patented Federal lode claims, 72 unpatented Federal lode claims and 77 State of Alaska mining claims covering approximately 4,800 acres (Figure 2). The land on which the project is situated is zoned as Mineral Land by the Fairbanks North Star Borough, giving mineral development activities first priority use. There currently are no unusual social, political or environmental encumbrances to mining on the project.

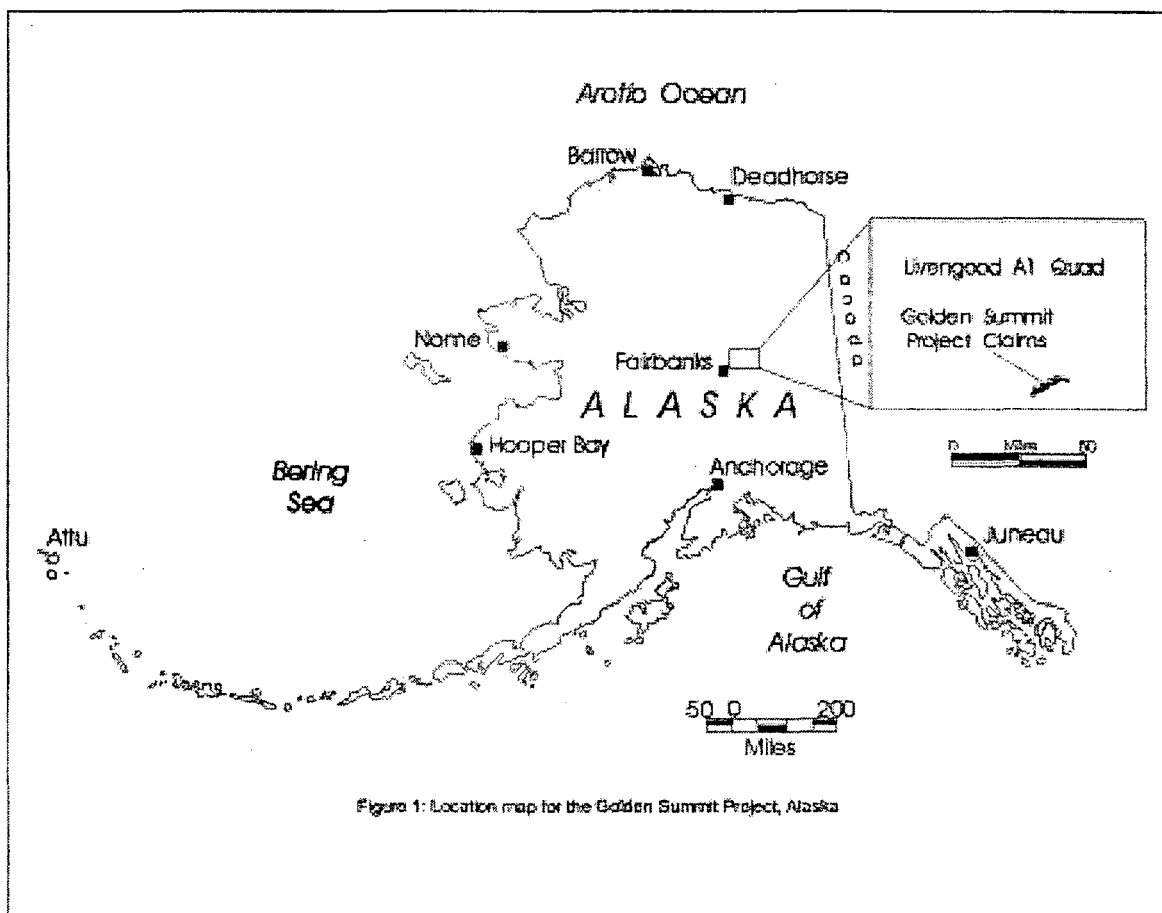


Figure 1: Location map for the Golden Summit Project, Alaska

Freegold acquired the right to earn a majority interest in the property in 1991 by entering into an option and joint venture agreement with Fairbanks-based Fairbanks Exploration Inc. By early 1997 Freegold had earned its interest and renegotiated the existing contract such that Freegold was left with a 93% interest in the property and had management control over the remaining 7% interest which was retained by Fairbanks Exploration.

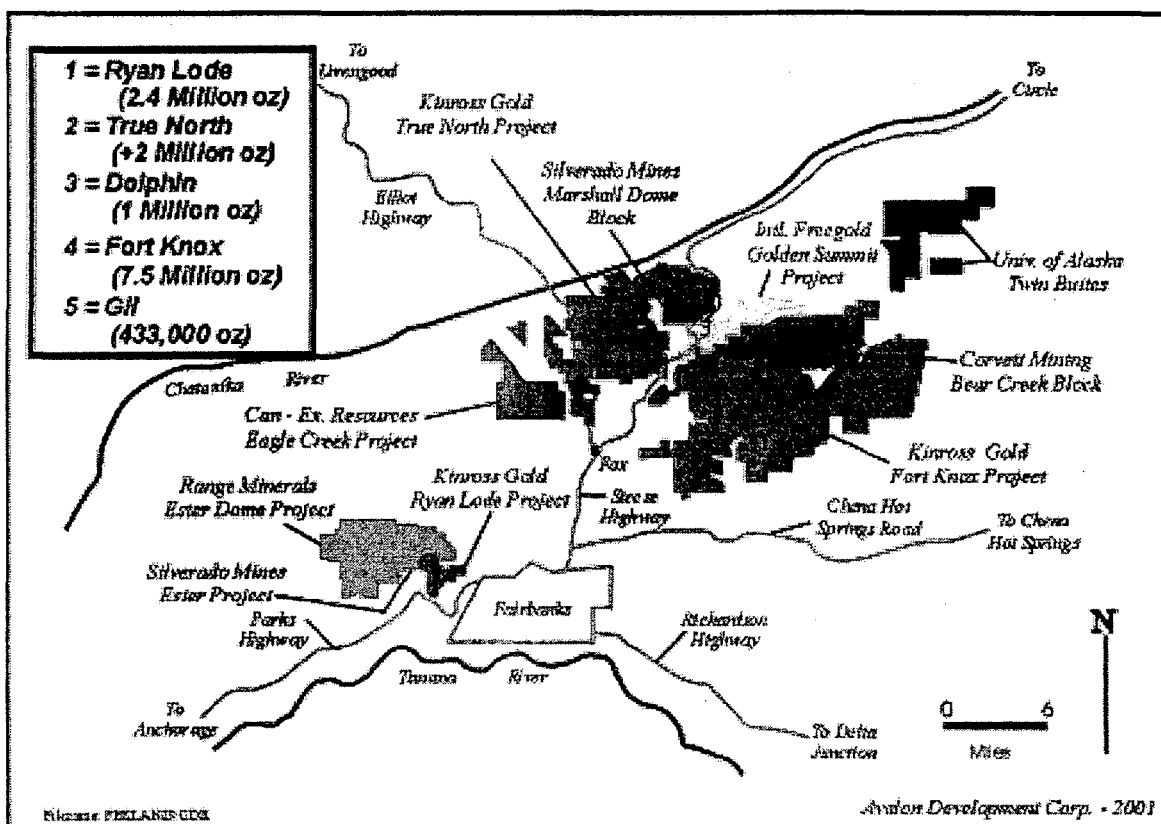


FIGURE 2: Major land blocks and gold resources of the Fairbanks Mining District, Alaska.

## ACCESS AND INFRASTRUCTURE

The paved Steese Highway transects the Golden Summit property and is connected to state and privately maintained gravel roads allowing easy access to most areas of the property on a year-round basis. A high voltage electrical power line, land telephone lines, and a cellular phone net service the property. The greater Fairbanks area supports a population of approximately 75,000 and has excellent labor and services infrastructure, including rail and international airport access. Exploration and development costs in the Fairbanks area are at or below those common in the western United States.

Elevations on the property range from 1,000 feet to over 2,200 feet. Topography in the area is dominated by low rounded hills dissected by relatively steep walled valleys. Outcrops are scarce except in man-made exposures. Vegetation consists of a tundra mat that supports subarctic vegetation. A variably thick layer of aeolian silt covers most of the property. Permafrost is limited to small discontinuous lenses on steep, poorly drained north-facing slopes and has posed no hindrance to past development. The climate in this portion of Alaska is dominated by 6 to 8 months of sub-freezing temperatures in winter followed by 4 to 6 months of warm summer weather. Average annual precipitation is 13 inches, mostly as snowfall. Mining operations can be conducted on a year-round basis and heap leach technology has been profitably employed at two locations in the district since 1985. Kinross Gold's Fort Knox gold mine, located 5 miles south of the project has produced about 1.5 million ounces of gold and operated year-around since entering commercial production in 1997. The 1.3 million ounce True North

gold deposit, also operated by Kinross Gold, is located 5 miles west of the Golden Summit project and achieved commercial production in early April 2001. Combined these two operations are expected to produce approximately 440,000 ounces of gold in 2002 at a cash cost of \$210 per ounce (Kinross Gold, 2002).

## HISTORY

Placer or lode gold mining has occurred almost continuously in the Golden Summit project area since gold was discovered in the district in 1902. Over 9.5 million ounces of placer gold have been recovered from the Fairbanks Mining District, of which 6.75 million ounces have been recovered from streams which drain the Golden Summit project (Freeman, 1992e). In addition, over 535,000 ounces of lode gold were recovered from past producing mines on the Golden Summit project (Freeman and others, 1996). More than 80 lode gold occurrences have been documented in the project area. Recent exploration discoveries in the Tintina Gold Belt have underscored the potential for bulk tonnage and high-grade deposits, both of which are known to exist in the Golden Summit project area (McCoy and others, 1997; Flanigan and others, 2000).

Freegold acquired an interest in the Golden Summit project in mid-1991 and since then has conducted extensive mapping, soil sampling, trenching, rock sampling, core and reverse circulation drilling and geophysical surveys on the project (Freeman, 1991; Galey and others, 1993; Freeman and others, 1996; Freeman and others, 1998). Over 15,000 feet of trenching have been completed along with 68,370 feet of core and reverse circulation drilling in 172 holes. A total of 7,729 soil samples have been collected. A total of 6,693 man-days of work have been completed during 7 separate work programs. Total expenditures during that period amount to \$6.3 million although the current property holdings encompass only 20% of the original land holdings on which these expenditures took place. The remaining 80% of the land package was been abandoned over the last 3 years leaving Freegold with its current land package.

## GEOLOGIC SETTING

Bedrock geology of the Fairbanks Mining District is dominated by a N60-80E trending lithologic and structural trend covering a 30-mile by 15-mile area (Robinson and others, 1990; Newberry and others, 1996). The Golden Summit project is situated in lower to middle Paleozoic metavolcanic and metasedimentary rocks of the Cleary sequence and Fairbanks Schist adjacent to a northwest trending thrust fault known as the Chatanika thrust (Figure 3). Rocks of the Fairbanks Schist and Cleary Sequences are exposed in the Cleary antiform, the northern of two northeast trending antiformal belts which form distinctive marker horizons in the mineralized portions of the district. Lithologies within the Cleary Sequence include quartzite, massive to finely laminated mafic to intermediate flows and tuffs, calc-schist, black chloritic quartzite, quartz-sericite schist of hydrothermal origin and impure marble. Lithologies in the Fairbanks Schist include quartz muscovite schist, micaceous quartzite and biotite quartz mica schist. These lithologies have been metamorphosed to the lower amphibolite facies.



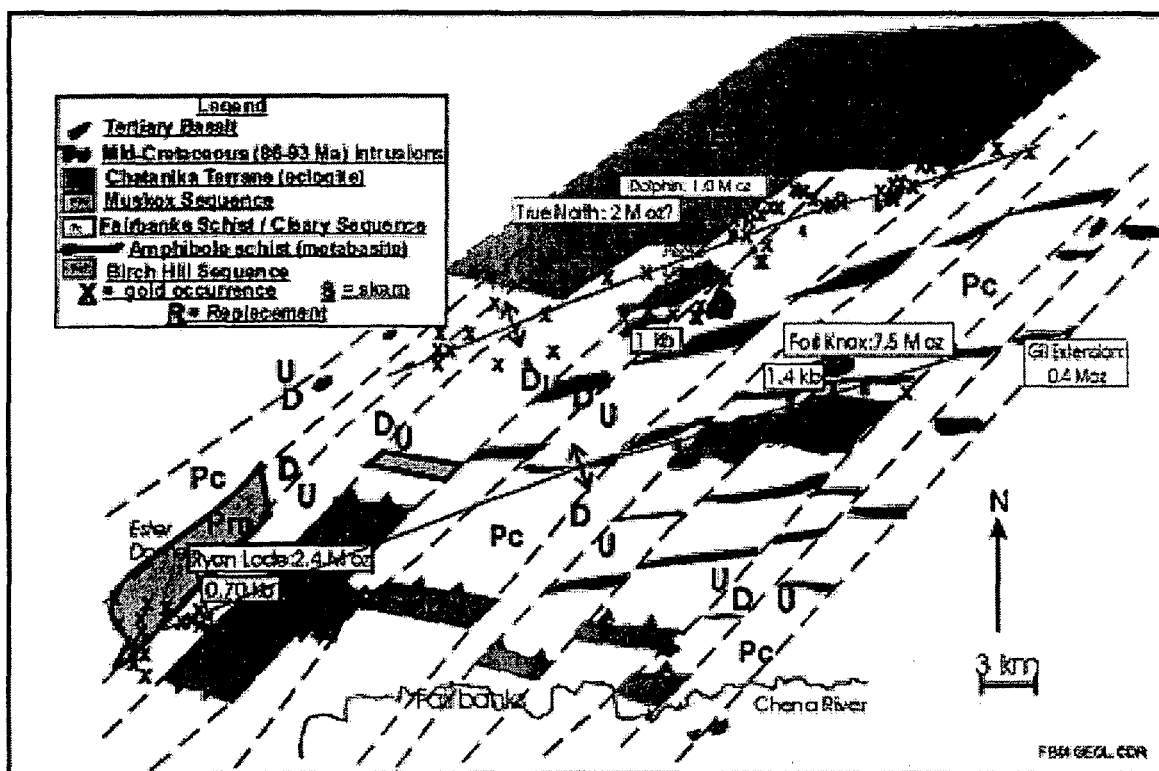


FIGURE 3: General geology of the Fairbanks Mining District, Alaska. Data from Newberry, and others, 1996 modified by Avalon Development, 2001.

Rocks of the Fairbanks Schist and Cleary Sequence have been over thrust from the northeast by lower amphibolite facies rocks of the Chatanika terrane (Newberry and others, 1996; Figure 3). The Chatanika terrane consists of quartz muscovite schist, carbonaceous quartzite, impure marble, garnet feldspar muscovite schist, and garnet-pyroxene eclogite that have yielded Ordovician  $\text{Ar}^{40}/\text{Ar}^{39}$  age dates. Motion on the Chatanika thrust fault has been dated at approximately 130 million years (Douglas, 1997) and resulted in structural preparation of favorable host units in the Chatanika terrane and adjacent lower plate rocks.

Intrusives in the Fairbanks district have yielded Ar 40/39 and K-Ar dates of 85-95 million years (Freeman and others, 1996). These intrusives range in composition from diorite to granite and possess elevated Rb/Sr ratios indicative of significant crustal contribution to subduction generated magmas. Several granodiorite to aplite intrusive bodies are present in the Golden Summit project area. The presence of hypabyssal intrusives and sporadic Au-W skarn mineralization in the Golden Summit project area suggests the area may be underlain by more extensive intrusive bodies similar to those on Pedro Dome and Gilmore Dome (Freeman and others, 1998). This conclusion is supported by airborne geophysical surveys (DGGs, 1995). Mineralization within the Pedro Dome, Gilmore Dome and Dolphin intrusive complexes suggests plutonic rocks pre-date mineralization.

Rocks on the Golden Summit project are folded about earlier northwest and northeast trending isoclinal recumbent fold axes followed by an open folded N60-80E trending system (Hall, 1985). Upper plate rocks of the Chatanika terrane have been affected by more intense northwest and northeast trending isoclinal and recumbent folding followed by folding along the

same N60-80E trending axis which affected lower plate rocks. Lithologic packages in both the upper and lower plates are cut by steeply dipping, high angle northwest and northeast trending shear zones (Figure 3). Airborne magnetic data in this part of the Fairbanks District indicate the presence of district scale east-west and northeast trending structures which appear to post-date N60-80E folding (DGGS, 1995). Gold mineralization on the Golden Summit project post-dates regional and district scale folding and is contemporaneous with or slightly younger than district-scale northeast trending structures.

## DEPOSIT TYPES

Recent exploration discoveries in the Fairbanks District have outlined a series of distinctive mineral occurrences which appear to be genetically related to mid-Cretaceous plutonic activity which affected a large area of northwestern British Columbia, Yukon, Alaska and the Russian Far East (Flanigan and others, 2000). This work, based on extensive geologic and structural mapping and analytical studies (major and trace element analysis, fluid inclusion microthermometry,  $^{40}\text{Ar}/^{39}\text{Ar}$  geochronology, and isotope analysis) has provided new information regarding gold metallogenesis in the Fairbanks district (Burns et al., 1991; Lelacheur et al., 1991; Hollister, 1991; McCoy et al., 1994; Newberry et al., 1995; McCoy et al., 1995). A synthesis of this information (McCoy et al., 1997) suggests an ore deposit model in which gold and high  $\text{CO}_2$  bearing fluids fractionate from ilmenite series, I-type mid-Cretaceous intrusions during the late phases of differentiation (porphyritic granites). The gold is deposited in anastomosing pegmatite and/or feldspar selvage quartz veins. Brittle fracturing and continued fluid convection and concentration lead to concentration of gold bearing fluids in intrusions and schist-hosted brittle quartz-sericite shear zones. Carbonate and/or calcareous metabasite horizons host W-Au skarns and replacement deposits. Structurally prepared calcareous and/or carbonaceous horizons are host bulk-mineable replacement deposits. These occur most distal to the intrusions within favorable host rock in the Fairbanks Schist and Chatanika Terrane. The various styles of significant hypogene gold mineralization in the Fairbanks Mining District are portrayed in a schematic cross section in Figure 7 (McCoy, 1997).

Seven different potentially economic gold deposit types have been identified in the Fairbanks district. They are:

1. Stockwork-shear style mineralization hosted in porphyritic intermediate to felsic intrusives. Mineralization contains Au with anomalous Bi, Te, W and trace Mo. Examples include Fort Knox (7.2 Moz) and Dublin Gulch (+1 Moz). There is a strong genetic relationship between host intrusion and gold mineralization.
2. porphyritic stockwork with intrusion/schist shear hosted Au-As-Sb (Ryan Lode, 2.4 Moz) with a strong genetic relationship between host intrusion and gold mineralization,
3. Gneiss or high-grade schist-hosted quartz veins proximal to causative intrusives. Metals associated include Au, Bi, and As and possibly Cu and W. Pogo (5.6 Moz) is the best examples of such mineralization.
4. base metal  $\pm$  Au, Ag and W intrusion hosted mineralization with a possible genetic relationship between precious metal mineralization and intrusion. Examples include Dolphin (0.6 Moz) and Silver Fox prospects,
5. structurally controlled mineralization hosted by schist-only high angle shear zones and veins. Associated metals include Au, As, Sb, Ag, Pb and W in low sulfide quartz-carbonate veins. Alteration adjacent to veins is pervasive quartz-sericite-

sulfide alteration that can extend for up to one mile from the source structure. Deposits were mined heavily prior to World War II and are noteworthy because of their exceptional grades (+1 to +5,000 opt Au). Examples include Cleary Hill (280,000 oz production), Christina, Hi Yu (110,000 oz production) and Ester Dome veins.

6. low angle, disseminated, carbonate-hosted Au-As-Sb mineralization associated with brittle thrust or detachment zones distal to generative intrusives. Examples include Gil Extension (0.4 Moz) and True North (2 Moz).
7. Shear-hosted monomineralic massive stibnite pods and lenses. Trace As, Au, Ag and Pb but these prospects are noteworthy because they appear to represent the most distal end members of the intrusive gold hydrothermal systems. Examples include Scrafford and Stampede mines.

## MINERALIZATION

Over 63,000 strike feet of mineralized shear zones have been identified within and immediately adjacent to the Golden Summit project (Freeman and others, 1996). The majority of the mineralized shear zones trend N60-80W and dip steeply to the southwest. However, the western end of the project area contains predominantly N60-80E trending, steeply north dipping shear zones. In addition, exploration activities conducted by Freegold have identified previously unrecognized shear zones trending N30-50W and due north-south (Freeman and others, 1998). These shear zones possess significantly different metal suites than N80W and N60E trending shears. These shear zone geometries and their distribution may represent sympathetic structures generated by regional scale shear couples related to Tertiary (post 55 Ma) motion of the Tintina and Denali faults (Flanigan and others, 2000).

The major historic lode gold mines of the Golden Summit project derived their production primarily from northwest and northeast trending high angle, low sulfide, gold-polymetallic quartz veins and shear zones which transect lower plate rocks of the Cleary sequence (Pilkington, 1969; Freeman and others, 1996). These shear zones are characterized by a metal suite containing free gold with tetrahedrite, jamesonite/boulangerite, arsenopyrite, stibnite and scheelite with minor base metals. Lead and sulfur isotope data, tellurium geochemistry and tourmaline compositions suggest a strong plutonic component to the Golden Summit shear hosted mineralization (McCoy and others, 1997).

## EXPLORATION

In 1996 Freegold conducted its first drilling directly specifically at high grade shear-hosted quartz vein mineralization. Its initial drilling target was the Cleary Hill Mine, the largest historic lode gold producer in the Fairbanks Mining District (estimated production of 281,000 ounces at 1.3 opt, Freeman and others, 1996). The mine last operated in 1942 at which point it was shut down by the War Powers Act. Attempts to reopen the mine in 1946 were thwarted by lack of working capital, manpower and equipment, not lack of reserves (Freeman, 1992a). The Cleary Hill Mine is hosted in lower plate mafic volcanics, quartzites and quartz muscovite schists on the north flank of the Cleary antiform (Freeman and other, 1996; Freeman and others, 1998). The Cleary Hill vein strikes N70-80W and dips 45 to 70 degrees to the south (Figure 5).

The dip of the vein varies according to the bedrock host with steeper dips in more competent rock units and shallow dips in less competent rock units. Production from the mine took place over six levels (approx. 400 vertical feet) and consisted of quartz vein-hosted coarse free gold with trace arsenopyrite, pyrite, boulangerite and tetrahedrite. Higher grade intervals in the mine (+100 to 5,000 opt) commonly are associated with acicular needles and felted masses of boulangerite and jamesonite hosted in white to gray quartz veins ranging in thickness from 1 to 5 feet. Average thickness of the Cleary Hill high-grade vein was less than 3 feet.

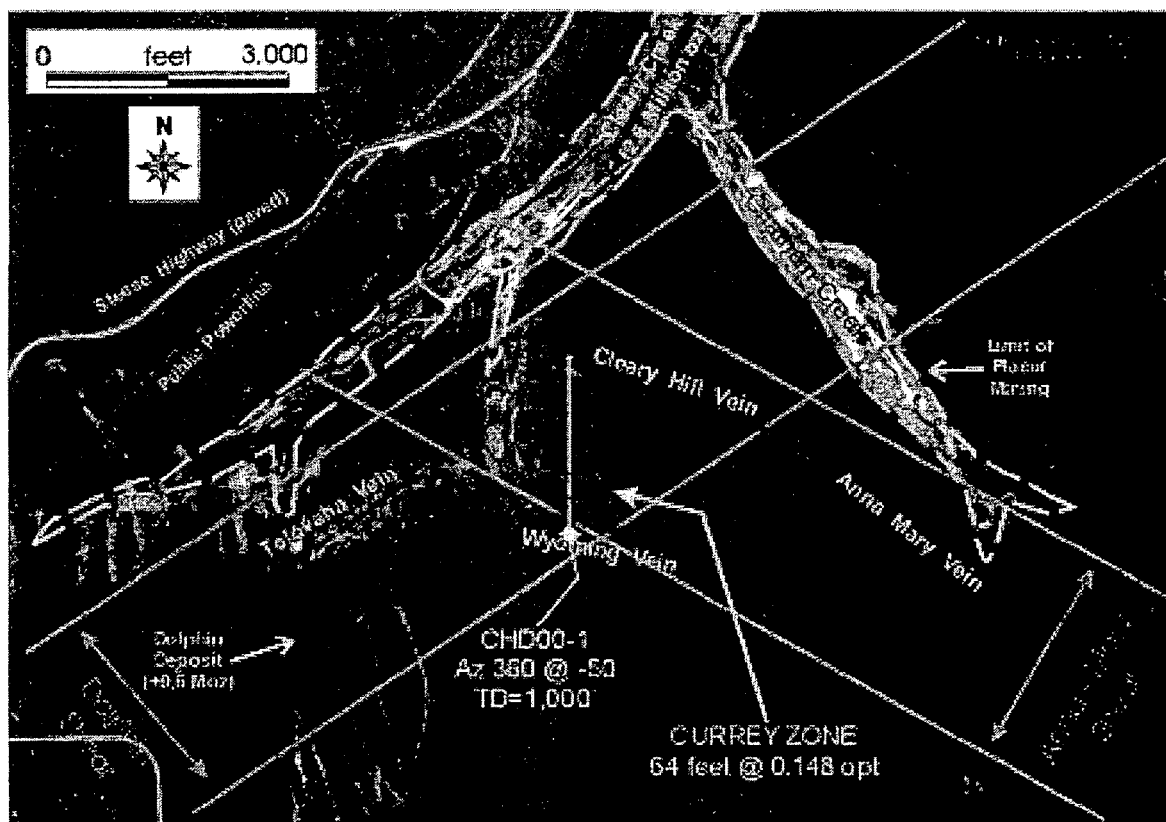


FIGURE 5: Airborne view of the Currey Zone, Golden Summit project

While there has been limited trenching on the surface dating to 1969, there was no surface drilling done at Cleary Hill until Freegold conducted a reverse-circulation drilling program in late 1996 (Freeman and others, 1996). This drilling returned encouraging results from the Powderhouse and Bankers stope areas of the mine. Drilling indicated at least two vein systems contained +0.5 opt gold over narrow widths below the old underground workings (Table 1). Due to unstable ground conditions, minimal drilling was accomplished in the footwall of the high-grade veins.

Positive results from the initial drilling lead to limited core drilling at Cleary Hill in 1997 and 1998 (Freeman and others, 1998; Table 1). Several of these core holes intercepted broad (>100 foot) intervals of low grade gold mineralization averaging >0.02 opt in the footwall of the high-grade veins. Neither old mine records or previous drilling had indicated the presence of this type of mineralization at Cleary Hill. This new information suggested that the Cleary Hill

prospect had potential as a bulk tonnage target with zones of significant high-grade mineralization extending to depths well in excess of previous underground mining.

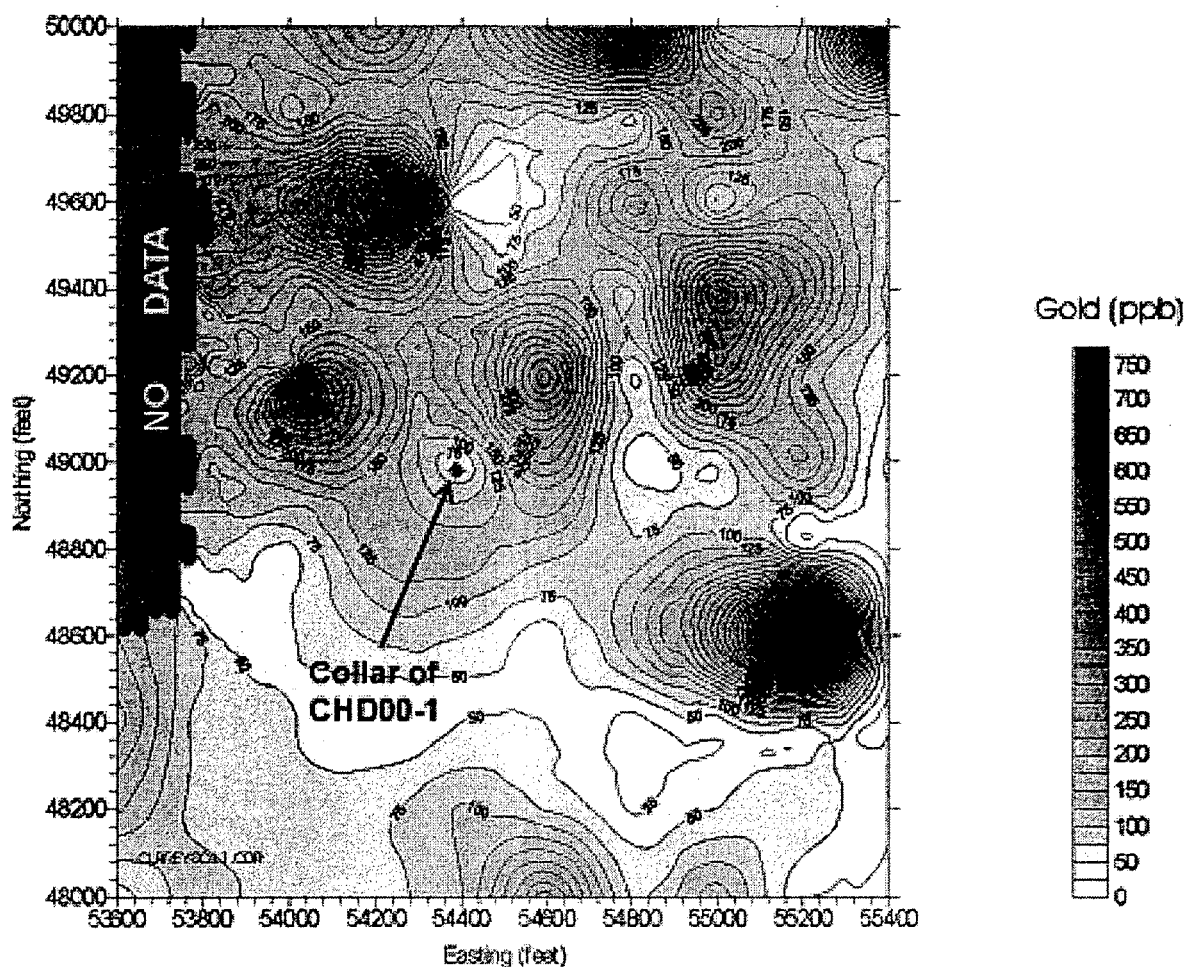


FIGURE 6: Gold in auger soil samples from the Currey zone. Data from Freeman and others, 1998

Subsequent soil auger sampling over the Cleary Hill area defined an extremely high-grade gold and gold pathfinder anomaly extending the length of the grid. Values as high as 2,750 ppb gold were detected in soils (Figure 6). Shadow imagery of soil data confirmed the presence of the N60E trending Dolphin shear zone through the Cleary Hill area. This district-scale feature hosts the 600,000-ounce Dolphin deposit which crops out approximately 1,500 feet southwest of the Cleary Hill mine area. The N70W trending Cleary Hill vein is one of several veins along what is locally known as the Anna – Mary shear and suggests the widespread mineralization at Cleary Hill may be controlled by the intersection of the Dolphin and Anna Mary shear zones (Figure 5).

Following completion of the 1998 drilling, a previously unknown underground drift map was made available to Freegold by a local prospector (Freeman, 2001). This drift extended south from the hanging wall of the Cleary Hill vein and indicated the presence of over 15 high-grade gold-bearing veins in an areas of the property where no previous exploration drilling had been conducted. Because both high-grade vein-hosted mineralization and low grade disseminated mineralization had been intersected in the Cleary Hill area it was recommended that one or more

north-dipping angle holes be drilled through the area to determine if one or both styles of mineralization were present in areas previously untested by drilling.

Table 1: Significant assays from the 1996-1998 Cleary Hill drilling

Holes #	From (feet)	To (feet)	Thickness (ft)	Au Grade (opt)
CHM96-1	10	235	225	0.025
including	25	60	35	0.106
including	45	50	5	0.569
CHM96-6	375 390	390	15	0.203
CHM96-7	245	260	15	0.211
including	245	250	5	0.585
CHD97-1	60	61	1	0.268
CHD97-1	161	177	16	0.022
CHD97-3	213	216	3	0.985
CHD97-3	278.1	440	161.9	0.025
Including	317	330.2	13.2	0.082
And	347	352	5	0.107
And	365	386.8	21.8	0.032
And	425.6	437.2	11.6	0.035
CHD97-4	394	544.1	150.1	0.037
Including	477.3	481.4	4.1	0.471
And	481.4	544.1	62.7	0.029
CHD9801	294	300	6	3.720
CHD9801	300	401	101	0.038
Including	310	315.3	5.3	0.138
And	324	329	5	0.093
And	339	344	5	0.082
And	361	366	5	0.068
And	396	401	5	0.262
CHD9801	437	447	10	0.030
CHD9801	592	632	40	0.064
Including	597	602	5	0.319
CHD9801	697	712	15	0.029
Including	702	707	5	0.046
CHD9801	747	798	51	0.025
Including	793	798	5	0.084
CHR9803	475	540	65	0.020
including	520	530	10	0.055
CHR9804	0	130	130	0.012
including	5	35	30	0.023
CHR9806	470	540	70	0.015

In mid-2000, Freegold approved the drilling of a single angle hole to test the above possibilities. Diamond core hole CHD00-1 was collared south of the Wyoming vein (southern-

most vein in the area) and was directed due north at -50 degrees inclination (Freeman, 2001; Figure 7). The hole was terminated at a depth of 1,000 feet. The drill core was photographed, quick-logged and obviously mineralized and/or altered intervals were split and assayed. Gold plus multi-element ICP analytical work was conducted by Bondar Clegg in Vancouver. Samples from the upper 350 feet of the hole were analyzed by ICP analysis using both a 4 acid and a 2 acid digestion procedures. Table 2 is a summary of significant intervals from the hole:

Table 2: Geochemical summary, core hole CHD00-1

From Feet	To Feet	Thickness feet	Average gold grade (gpt)	Average gold grade (opt)
116	125	9	3.74	0.109
218	282	64	4.90	0.143
Inc. 218	225	7	13.72	0.400
And 225	265	40	5.07	0.148
343	348	5	1.96	0.057
405	410	5	1.81	0.053
520	522	2	86.12	2.513
699.5	705	5.5	1.22	0.035
876.3	878.6	2.3	1.64	0.047
896.4	897.4	1	2.23	0.065
946.4	949.5	3.1	2.25	0.065

Based on data derived from the 1939 drift map, the interval from 218 to 282 feet correlates with a previously unknown shear known now known as the Currey zone (Freeman, 2001; Figure 7). The Currey zone was intercepted from the footwall in the 1939 crosscut but was not mined (Figure 8). Given the highly fractured and brecciated nature of the Currey zone in hole CHD00-1 and the fact that the 1939 crosscut was within the oxide zone in this area, it is possible that the 1939 crosscut was terminated due to bad ground conditions in the Currey zone.

The strike of the Currey zone in the 1939 crosscut is N80°E with a 55° south dip. This strike and dip is consistent with other vein orientations in the Cleary Hill mine area. Based on these data the 64 foot thick drill intercept in hole CHD00-1 has a true width of approximately 63 feet and projects to the surface approximately 220 feet north of the collar of hole CHD00-1 (Figure 7). Old trenches and prospect pits are common in the area but are caved and overgrown with vegetation so they provide no information regarding previous work on the Currey zone. Available records do not describe anything like the Currey breccia which suggests it was not recognized by previous prospectors or mine operators.

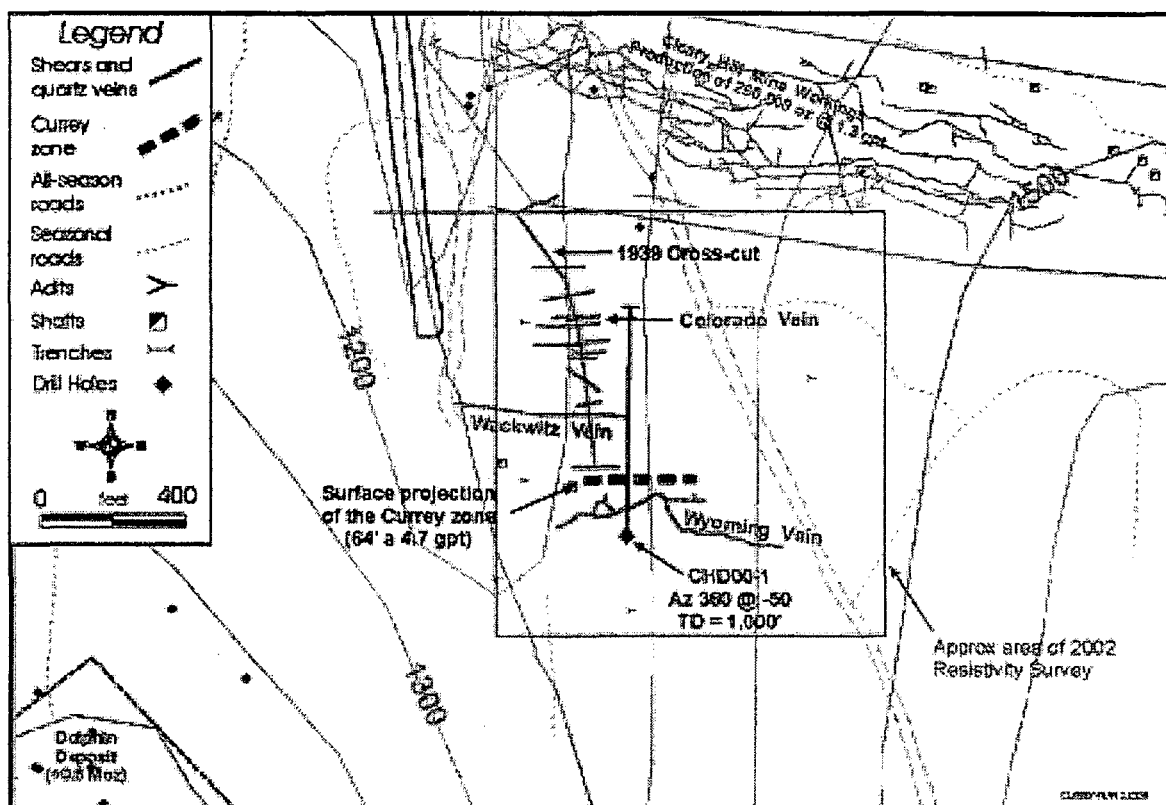


FIGURE 7: Plan map of Cleary Hill mine area. Data by Avalon Development, 2000.

Gold mineralization in the Currey zone drill core intercept is marked by strong pervasive poly-phase quartz veining, localized black quartz flooding (possible fine grained sulfides?), pervasive sericite alteration and multiple event brecciation and silicification (Freeman, 2001; Figure 9). Coarse grained euhedral pyrite is common and is accompanied by extremely fine grained dark gray sulfides or sulfosalts which are normally present in high grade vein deposits in the district. Open space vugs with dogtooth quartz crystals occur locally. A hand specimen of sample 110920 (235-240') contains fragments of sericite altered medium grained granodiorite cut by numerous thin (<1 mm) quartz veinlets. This interval grades 6.37 gpt gold, 7,054 ppm arsenic and 221 ppm antimony. Veinlets within the intrusive fragments terminate at the fragment boundary indicating the intrusive was cut by quartz veins and subjected to sericitic alteration prior to being included in the Currey zone breccia. Except for the higher quartz vein volume in the Currey zone intrusive fragments, the intrusive itself looks very similar to the Dolphin intrusive which crops out only 1,500 feet to the southwest (Freeman, 1996b; Freeman, 1996c; Figure 5). This is the first time mineralized intrusive has been intercepted in the Cleary Hill area. Its presence strengthens the theory that the Dolphin shear zone is genetically related to gold mineralization in the Cleary Hill mine area.

Anomalous gold values in the Currey zone are associated with highly anomalous arsenic (1,672 to >10,000 ppm) and antimony (89 to >2,000 ppm). Sporadic anomalous lead (to 219 ppm) and silver (to 6.9 ppm) also occur in the Currey zone. Metal values in the Currey zone appear to be concentrated toward the upper (hangingwall?) contact beginning at 218 feet. Gold, silver, arsenic, antimony cadmium, copper and sulfur peak at the upper contact and decrease down-hole toward the lower contact zone at 282 feet. Neither Bi nor Te is above detection limit



in the Currey zone indicating mineralization is distal to an intrusive source. This observation is in agreement with previous work done on this area of the Golden Summit project (Flanigan and others, 2000).

A correlation matrix analysis conducted on 30 samples returned from 0 to 350 depth in the hole indicate gold is strongly correlative with arsenic ( $p = 0.83$ ) and silver ( $p = 0.75$ ) and moderately correlative with antimony ( $p = 0.69$ ). Antimony is strongly correlative with silver and moderately correlative with copper suggesting the presence of freibergite (argentiferous tetrahedrite), a common mineral species in the vein and shear deposits in the district. Unlike most other high grade occurrences in the Golden Summit area, lead is poorly correlative with gold, antimony and arsenic. Although manganese is not normally a diagnostic pathfinder in the Fairbanks District, this element is strongly depleted in the Currey zone. The cause of this depletion is unknown but may be related to relative depletion due to silica flooding and veining. It may also be explained if the host rock which makes up the matrix of the Currey zone breccia is predominantly felsic intrusive rock. Despite the presence of pervasive sericitic alteration, potassium also is depleted in the Currey zone. Sodium is depleted in the Currey zone, possibly as a result of plagioclase-destructive alteration. Unlike other mineralized intervals in hole CHD00-1, sulfur is strongly enriched in the Currey zone lending credence to the conclusion that the mineralization intercepted in the Currey zone constitutes a significant new discovery on the Golden Summit project.

The strike and dip extents of the Currey zone are unknown at present. The closest drilling to the east of the discovery hole is over 3,000 feet away in the Tamarack drill area (Freeman and others, 1998). There are no drill holes of any kind to the west of the discovery hole although the most likely candidates for an on-strike extension of the Currey zone are the Dolphin deposit (+600,000 oz @ 0.020 opt, Adams, 1996) or Tolovana shear zone, both of which are at least 1,500 feet away. Soil auger sampling conducted in 1995 through 1998 covers only a portion of the strike extent of the Currey zone (Freeman and others, 1996; Freeman and others, 1998). Additional soil sampling can not be conducted to the west due to the extremely disturbed nature of the area as a result of placer gold mining in Bedrock Creek and trenching conducted on the Tolovana vein in the mid-1980's. The three prominent gold in soil highs that are present north of the collar of CHD00-1 (Figure 6) are aligned approximately N80E and occur approximately 220 feet north of the collar of hole CHD00-1. They may be a manifestation of the Currey zone at surface but only trenching and drilling will determine if this statement is accurate.

In February 2002 Freegold completed approximately 4.5 line kilometers of capacitive coupled resistivity and VLF-EM surveys in the Cleary Hill mine area. These surveys were designed to better define the structures which host high grade gold mineralization intersected in drilling conducted by the company in 1996 through 2000. Preliminary data from these surveys suggest capacitive coupled resistivity was successful in outlining known veins and shear zones. Reduction of these data are in progress as this report is being written.

## DRILLING

Drilling completed on the Golden Summit project includes with 68,370 feet of core and reverse circulation drilling in 172 holes. Drilling was conducted by third-party contractors in 1992, 1994-98 and 2000 and consisted of both diamond core and down-hole hammer reverse

circulation drilling. All drilling conducted during these programs was managed by Avalon Development and was conducted by local and national drilling contractors. Reverse circulation samples consisted of one-eighth splits of each 5 foot interval while all core samples were sawed at variable intervals depending on visible geological criteria.

## SAMPLING METHOD AND APPROACH

During the period 1992 to 2000, analytical work was completed by Chemex Labs and Bondar Clegg Ltd. at their facilities in Vancouver, B.C. Duplicate samples were inserted on a one for ten basis beginning in 1996 while blanks and standards were used in 1998 and 2000. During all programs, Avalon Development collected, logged and retained the samples collected in the field until turned over to a commercial laboratory representative.

## SAMPLE PREPARATION, ANALYSES AND SECURITY

All samples collected on the Golden Summit project were retained at Avalon's secure warehouse facility until picked up by Chemex or Bondar Clegg. Sample preparation was completed by Chemex or Bondar Clegg in their laboratories in Anchorage and/or Fairbanks. Analytical work consisted of a series of gold by fire assay plus multi-element inductively coupled plasma (ICP) analyses.

## DATA VERIFICATION

Sample duplicates were inserted into drill sample strings on a one for 10 basis. Blanks and a small number of standards were introduced into sample strings in 1998 and 2000. Sample blanks composed of Browns Hill Quarry basalt from the Fairbanks Mining District, Alaska were inserted on a minimum 1 for 25 basis into the sample sequence. Extensive previous analysis of this same blank rock type has given Avalon a large geochemical database for use on a comparative basis. Analyses of variance performed by on samples analyzed by Bondar-Clegg and Chemex indicate no unusual or spurious sample results in the blanks submitted. Samples containing coarse gold will present repeatability problems which future exploration needs to consider.

## ADJACENT PROPERTIES

The Golden Summit is surrounded by over a dozen small to moderate size properties owned by small companies and individuals. Several of these properties contain old mines and known-gold-bearing prospects (Freeman, 1992a). While some of these properties contain mineral resources or mineralization that are similar to that known to exist on the Golden Summit project, a discussion of these prospects is outside the scope of this summary.

## MINERAL PROCESSING AND METALLURGICAL TESTING

Freegold has completed no metallurgical or petrographic analyses on samples from the Currey zone. Metallic screen analyses were conducted on selected samples of the Cleary Hill mine drill samples and indicate a significant nugget effect caused by coarse free visible gold (Freeman and others, 1996).

## MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

There are no mineral resources or mineral reserves on the Golden Summit project.

## OTHER RELEVANT DATA AND INFORMATION

There are no other data available to the author that bear directly on the potential of the Golden Summit project.

## INTERPRETATIONS AND CONCLUSIONS

The Golden Summit project is located in a road accessible mining district with excellent land status and infrastructure. Several historic producing mines are present on the property and extensive surface exploration has been conducted on the property and on adjacent lands since 1992. Drilling conducted prior to 2000 indicated the property had potential for high-grade vein hosted resources such as those intercepted beneath the old underground workings of the Cleary Hill mine. Drilling completed in 2000 indicated that both high-grade vein mineralization and shear-hosted gold mineralization are present on the property, either of which has potential for future resource development.

## RECOMMENDATIONS:

Based on preliminary field, laboratory and literature studies completed to date, the following recommendations for future work are warranted:

1. **Core Drilling:** Two additional diamond drill holes should be drilled into the Currey zone to establish its true dip (Figure 8). Proposed hole CHD00-2 would be approximately 300 feet deep and drilled at -65 degrees. Proposed hole CHD00-3 would be 250 feet deep at an angle of -50 degrees. Both holes should be drilled with HX core with emphasis on recovery in extremely broken shear zones. Holes CHD00-2 and CHD00-3 would be collared from the same pad located about 100 feet due north of hole CHD00-1. The estimated cost of this drilling is \$30,000.
2. **Geophysics:** Pending the reduction of resistivity data collected in February, 2002, additional resistivity or comparable geophysics may be warranted. Given the lack of outcrop in the area, geophysical work may help reduce trenching or drilling designed to find and determine the strike and dip of mineralized structures. The estimated cost

of doubling the strike length of the Currey zone that was covered by the initial resistivity survey is approximately \$12,000.

3. **Trenching:** At least two dozer or backhoe trenches should be placed over the surface projection of the Currey zone to the east and west of the drill line (Figure 8). The purpose of these trenches is to determine the strike of the Currey zone prior to additional drilling. The 1939 cross cut adit indicates the Currey zone strikes N80°E and dips approximately 55° degrees south. Both the strike and dip of the Currey zone from the 1939 cross cut are plausible given other vein orientations in the Cleary Hill area. Trenches excavated in Phase 2 will be mapped and sampled on close-spaced centers (5 feet or less) to determine grade variations across the shear zone. Structural details will be mapped to determine the controls on mineralization. Selected samples should be reanalyzed by metallic screen methods to quantify nugget effect. Several composite samples from trenching should be submitted for bottle roll cyanide extraction analysis to determine the leachability of oxidized material from the Currey zone. The estimated cost of this work is \$15,000.
4. **CHD00-1 Work:** All unassayed intervals in hole CHD00-1 should split and assayed using 4-acid digestion procedures. In addition, preliminary metallurgical and petrographic work should be considered for rejects from hole CHD00-1 to determine the cyanide leach characteristics of the Currey zone below the oxide zone and to determine how the gold occurs in the zone. The estimated cost of this work is \$2,500.
5. **Logistics:** Given the superb access and infrastructure of the Cleary Hill mine area, trenching and drilling on the Currey zone can be conducted at any time of the year except during spring thaw and winter freeze-up. For internal budgeting purposes estimated costs for follow-up work are estimated at \$25 per foot of trench constructed and sampled and \$50 per foot of core hole drilled and sampled.
6. **Data Compilation:** The Golden Summit property contains a number of past producing mines as well as gold prospects where mineralization has been documented. Primary among these prospects are the Hi Yu mine (110,000 ounces of past production), McCarty – American Eagle mine (60,000 ounces of past production) and Newsboy mine (40,000 ounces of past production, Freeman and others, 1996). Exploration success at the Cleary Hill mine area was a direct result of data compilation and conversion to a GIS platform that enabled accurate drill hole placement. Similar data compilation needs to be conducted at the other high grade mines and prospects on the property. No budget is allocated for this work since specific objectives must be agreed upon prior to estimating the cost of such work.

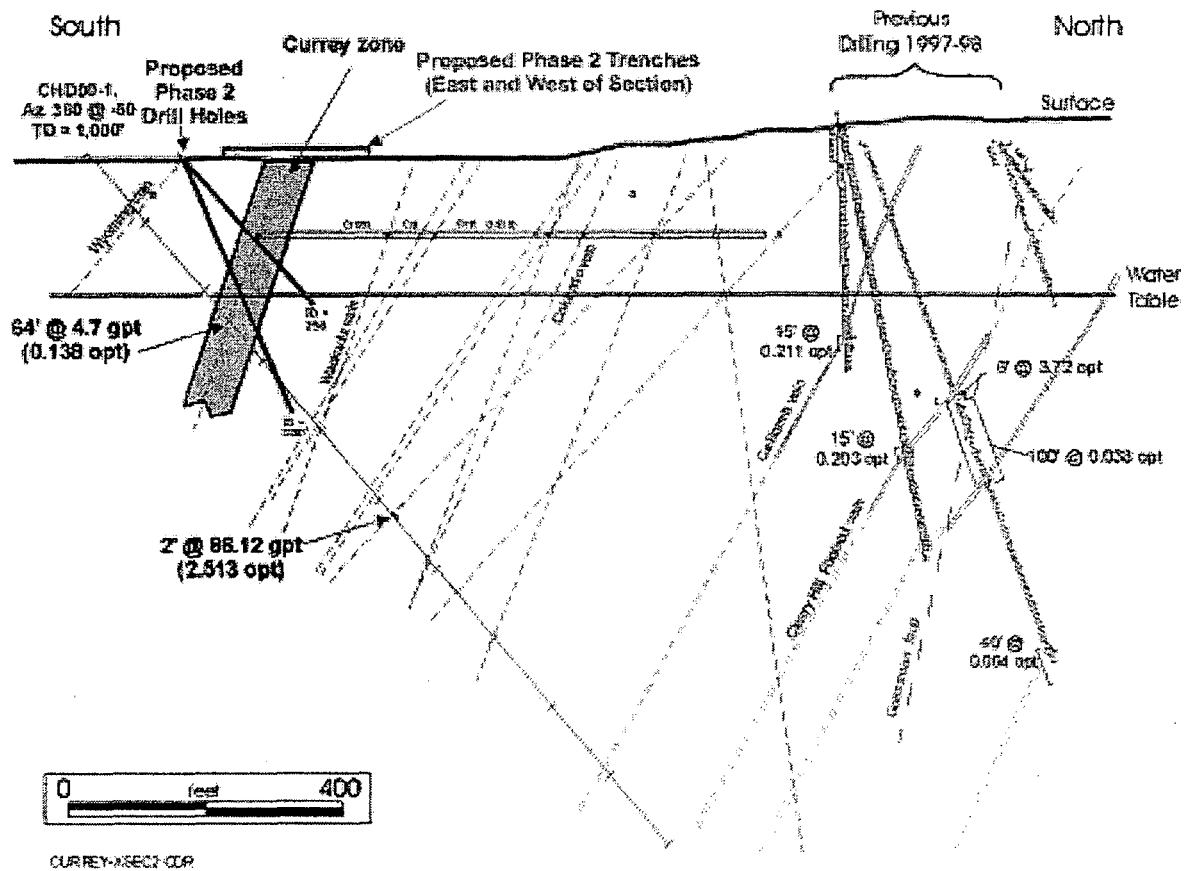


FIGURE 8: Proposed Phase 2 drilling and trenching on the Cussey zone, Cleary Hill mine, Golden Summit project, Alaska. Data from Avalon Development, 2001

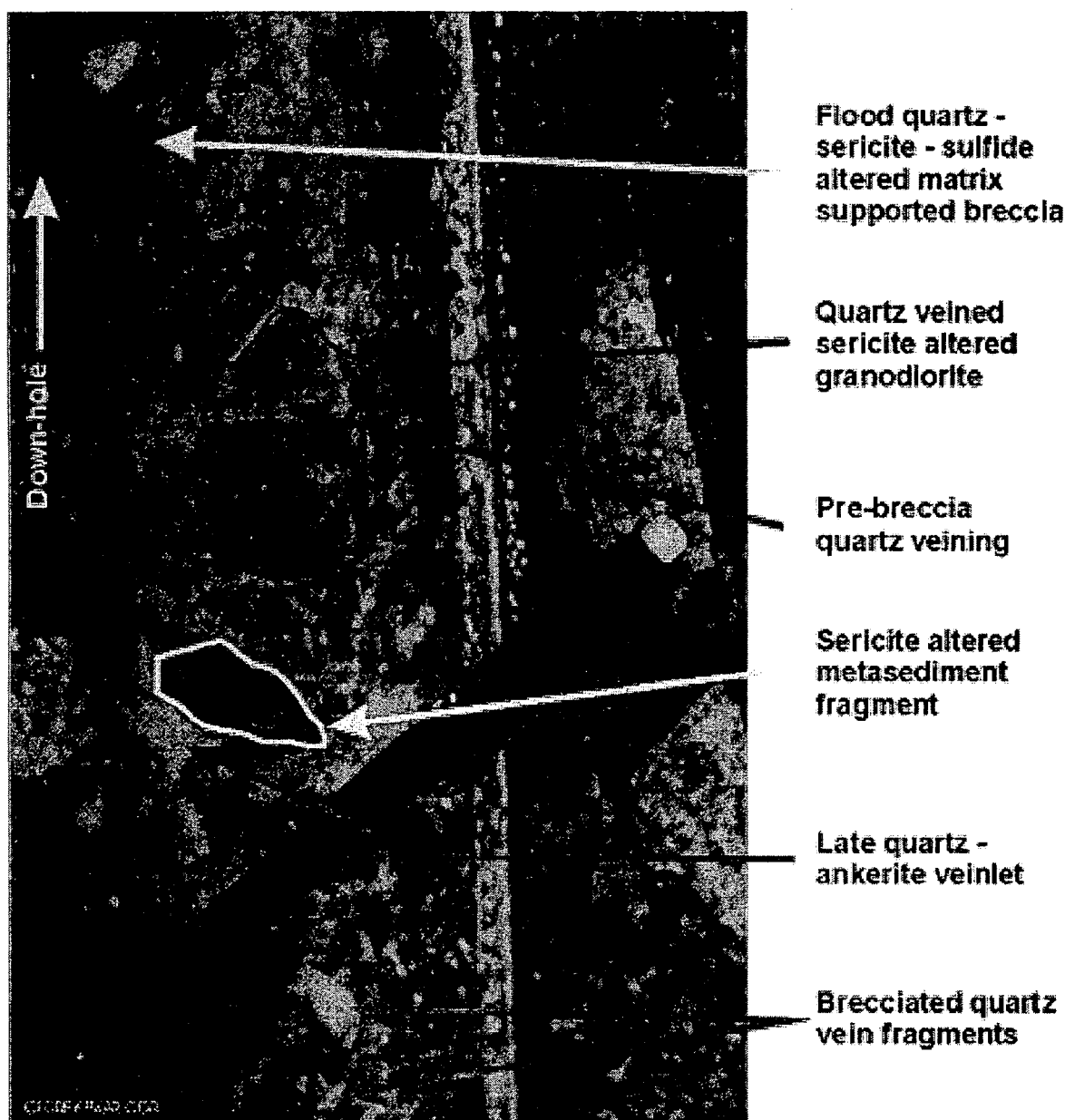


FIGURE 9: Currey zone breccia, hole CHD00-1 at 238 feet depth. Interval from 235 to 240 feet grades 6.3 gpt (0.186 opt) gold Interval from 218 to 282 feet grades 4.7 gpt (0.138 opt) gold

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## STATEMENT OF QUALIFICATIONS

I, CURTIS J. FREEMAN, consulting geologist and President of Avalon Development Corporation, an Alaska corporation with a business address of P.O. Box 80268, Fairbanks, Alaska 99708, HEREBY CERTIFY THAT:

1. I am a graduate of the College of Wooster, Ohio, with a B.A. degree in Geology (1978). I am also a graduate of the University of Alaska with an M.S. degree in Economic Geology (1980).

2. From 1980 to the present I have been actively employed in various capacities in the mining industry in numerous locations in North America, Central America, South America and Africa.

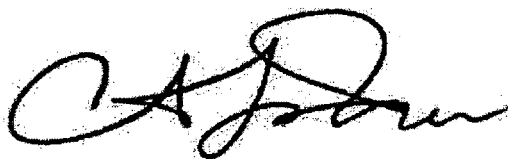
3. I personally conducted and directed others in the fieldwork on the Golden Summit project between 1992 and the present and have been engaged by Freegold Recovery Inc. USA to complete this report and make recommendations for future work in the area.

4. I do not own any interest in the properties which comprise the Golden Summit project. I own controlling interest in Avalon Development Corporation which owns 71,000 common shares of International Freegold Mineral Development Inc. which were issued to Avalon Development as part of a finder's fee for work conducted by Avalon Development in the Fairbanks Mining District, Alaska. Pending approval by regulatory authorities, Avalon Development is due 25,000 shares of the common stock of International Freegold Mineral Development Inc. as a finder's fee on properties unrelated to the Golden Summit project. I own no other interest in any company or entity that owns or controls an interest in the properties which comprise the Golden Summit project.

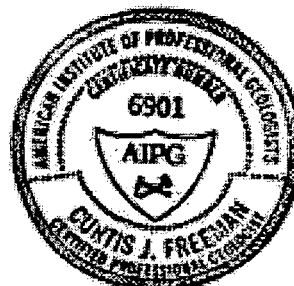
5. I am a Certified Professional Geologist with the American Institute of Professional Geologists (CPG #6901) and I am a Licensed Geologist in the State of Alaska (#AA159).

6. I approve of this report being used for any lawful purpose as may be required by Freegold Recovery, its parent or and their affiliates.

DATED in Fairbanks, Alaska this 1<sup>st</sup> day of March 2002.



Curtis J. Freeman, BA, MS, CPG#6901, AA#159



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